

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
QUALCOMM Incorporated)	WT Docket No. 05-7
)	
Petition for Declaratory Ruling)	
To: The Commission		

**JOINT COMMENTS AND INFORMAL OBJECTION OF
THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC. AND
THE NATIONAL ASSOCIATION OF BROADCASTERS TO THE
PETITION FOR DECLARATORY RULING OF QUALCOMM INCORPORATED**

**NATIONAL ASSOCIATION
OF BROADCASTERS**

Marsha J. MacBride
Executive, Executive Vice President,
Legal and Regulatory Affairs
Valerie Schulte,
Deputy General Counsel
Kelly Williams
Sr. Director of Engineering and
Technology Policy
NATIONAL ASSOCIATION
OF BROADCASTERS
1771 N Street NW
Washington, D.C. 20036
(202) 429-5456 (tel.)
(202) 429-4199 (fax)

**ASSOCIATION FOR MAXIMUM
SERVICE TELEVISION, INC.**

David L. Donovan
President
Victor Tawil
Senior Vice President
ASSOCIATION FOR MAXIMUM
SERVICE TELEVISION, INC.
P.O. Box 9897
4100 Wisconsin Avenue, NW
Washington, D.C. 20016
202-966-1956 (tel.)
202-966-9617 (fax)

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SUMMARY

The “Petition for Declaratory Ruling” of QUALCOMM, Inc. seeks relief that would plainly violate the Administrative Procedure Act and harm the public’s access to free, over-the-air television. QUALCOMM asks the Commission to amend 47 C.F.R. § 27.60 – at the expense of the public’s television service – by “declaration.” The resulting interference would mean a loss of free, over-the-air television service to potentially million of viewers. Quite apart from this direct harm, such interference would be particularly disruptive to the public’s acceptance of DTV technology, thereby frustrating Congressional expectations that the Commission will foster a successful conclusion to the digital transition. MSTV and NAB accordingly urge the Commission to uphold 47 C.F.R. § 27.60 and dismiss QUALCOMM’s Petition or, in the alternative, treat it as a Petition for Rulemaking to permit full consideration of the possible impact of the rule change QUALCOMM proposes.

First, a Petition for Declaratory Ruling is not the proper administrative vehicle to amend Section 27.60 by giving QUALCOMM and other 700 MHz entrants the right to create up to two percent new interference to the public’s television service. The television interference protection standards of Section 27.60 prohibit 700 MHz entrants from creating *any* new interference to viewers of free, over-the-air television. That interference standard can only be amended in the context of a notice-and-comment rulemaking. Moreover, unlike the unique and limited situations where the Commission has allowed broadcast-to-broadcast interference to achieve a net growth in viewers’ access to over-the-air television services, the requested standard would *reduce* access to free, over-the-air television while privileging QUALCOMM’s MediaFLO, a *pay* television service.

Second, the Commission should reject QUALCOMM’s request for a “declaration” that 700 MHz entrants may use the broadcast OET-69 methodology to demonstrate

“compliance” with the television interference protection standards – especially given QUALCOMM’s proposal that such analyses be allowed for entrants operating *within* an adjacent station’s licensed service contour. It would be improper to amend Section 27.60 to include an OET-69 analysis outside of a notice-and-comment rulemaking. The OET-69 methodology was developed to measure DTV-to-DTV interference; thus, it is thus not surprising that Section 27.60 and the various Orders which established the television interference protection standards for lower 700 MHz entrants less than three years ago make no reference to OET-69. In addition to these fatal procedural defects, the amendments QUALCOMM suggests would cause significant harm to the public interest by causing the Commission to substantially underestimate the impact of 700 MHz operations’ on the public’s television service.

Third, Section 27.60 does not allow the requested “streamlined” procedures for applications of 700 MHz entrants, which as proposed by QUALCOMM would favor grant of applications premised on the flawed OET-69 analysis. QUALCOMM’s contention that these streamlined procedures would “increase the value” of its spectrum holdings overlooks the important value of free, over-the-air television to the American public.

In addition to these harms, the requested amendments would provide QUALCOMM an unjust windfall. When QUALCOMM obtained its spectrum at auction in 2003, it and other potential bidders had full notice that they could obtain the right to operate on 700 MHz spectrum only to the extent that such operation does not harm the public’s access to out-of-core television services during the transition. The Commission should not grant QUALCOMM the requested windfall, especially in light of the harms which QUALCOMM’s proposals would cause to the public’s television service.

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The Association for Maximum Service Television, Inc. (MSTV) and the National Association of Broadcasters (NAB)¹ urge the Commission to uphold Section 27.60 and dismiss the Petition for Declaratory Ruling of QUALCOMM Inc. (QUALCOMM), or, in the alternative, treat it as a Petition for Rulemaking.² QUALCOMM's Petition inappropriately seeks to amend the television interference protection standards of Section 27.60 outside of a notice-and-comment rulemaking. In addition to the Petition's procedural defects, these requested amendments would undermine the goals of Section 27.60, which the Commission adopted less than three years ago to protect viewers of out-of-core UHF channels during the DTV transition.

Section 27.60 of the Commission's rules prescribes a strict "no new interference" standard for the operations of lower and upper 700 MHz entrants during the digital transition.

¹ MSTV is a non-profit trade association of local broadcast television stations committed to achieving and maintaining the highest technical quality for the local broadcast system. NAB is a non-profit, incorporated association of radio and television stations that serves and represents the American broadcast industry.

² Petition for Declaratory Ruling, QUALCOMM Inc., WT Docket No. 05-7, at i (filed Jan. 10, 2005) (QUALCOMM Petition).

The Commission adopted this rule to preserve UHF television services by “ensur[ing] that new licensees in the Lower 700 MHz Band protect existing analog TV operations and new DTV channel allotments and operations that will occupy the band during the transition period.”³ Although it took no part in the notice-and-comment rulemakings which established Section 27.60, QUALCOMM seeks to have the “no new interference” standard eliminated by “declaration.”⁴ Specifically, it asks that (1) 700 MHz entrants be allowed to create allegedly “*de minimis*” interference to up to two percent of viewers within a given station’s licensed service contour; (2) a broadcast interference standard, OET-69, be declared an “acceptable” methodology for demonstrating “compliance” with Section 27.60, including when the 700 MHz entrant proposes operation inside an adjacent television station’s licensed service contour; and (3) new procedures be adopted to overwhelmingly favor grant of 700 MHz applications premised on the unsuitable OET-69 methodology.

As explained below, each of these requests should be denied. As an initial matter, QUALCOMM’s Petition is procedurally defective because it is seeking to amend Section 27.60 without appropriate notice and comment. Moreover, QUALCOMM’s requested amendments to Section 27.60 would significantly degrade the public’s access to free, over-the-air television. Specifically, use of OET-69, especially within an adjacent station’s licensed service contour, would dramatically underestimate the interference impact of new 700 MHz services on reception

³ 17 FCC Rcd. 1022, 1033 (2001).

⁴ QUALCOMM filed pleadings in the upper 700 MHz service rules proceeding that were solely related to its efforts to obtain upper 700 MHz spectrum outside of the auction process. *See, e.g.*, Petition for Declaratory Ruling, QUALCOMM Inc., WT Docket No. 99-168 (filed Jan. 28, 2000) (arguing that the spectrum at 752-762 MHz and 782-792 MHz is “the only spectrum suitable for deployment of CDMA-based wireless services which is available, free of legal encumbrances, in any time frame.”).

of local broadcasters' signals. These miscalculations would be exacerbated by the streamlined procedures which would favor 700 MHz applications inappropriately premised on OET-69.⁵

In addition, the relief QUALCOMM seeks is contrary to the well-recognized public interest in protecting the public's access to free, over-the-air television services. Unlike the unique situations where the Commission has allowed broadcast-to-broadcast interference to promote the DTV transition and achieve a net growth in viewers' access to over-the-air television services, QUALCOMM's proposal for a two percent interference allowance would *reduce* access to free, over-the-air television for the benefit of QUALCOMM's MediaFLO, a *pay* video service. This tradeoff would harm the public interest by privileging a pay service at the expense of the public's free, over-the-air television service.

QUALCOMM's proposal will have a negative impact on those consumers viewing channels 54, 55, and 56 across the entire United States. According to the FCC,⁶ the 41 NTSC (analog) stations occupying these channels are located in 33 markets and serve more than 109 million people with Grade B television service. In addition, there are 51 DTV stations operating on these channels in 40 television markets, serving more than 126 million people with their DTV service contour.⁷ Because QUALCOMM inappropriately applies OET-69 analysis to both co-channel and adjacent channel interference within a station's service area, the potential interference may greatly exceed the proposed two percent "*de minimis*" standard. The

⁵ MSTV and NAB also note that QUALCOMM's nationwide provision of "video and audio content ... to third generation mobile phones" may raise program exclusivity and related concerns applicable to the retransmission of broadcast content. *See* QUALCOMM Petition at i. These issues are extremely important and must be fully addressed in the rulemaking context before granting petitions such as that submitted by QUALCOMM.

⁶ *See DTV Channel Election Information and First Round Filing Election Deadline*, Public Notice, DA 04-3922, Dec. 21, 2004.

⁷ *Id.*

manifestation of this interference will be most pronounced in the DTV service, where it will cause digital sets to lose entirely the picture and sound. Such a result is contrary to the Commission's objectives to increase power and DTV service areas of all stations, even those occupying channels in the 700 MHz band.⁸ At a minimum, the net impact of this Petition would be to harm over four million viewers across the United States.⁹

It is worth noting that QUALCOMM is the third 700 MHz entrant in less than a year to improperly seek an amendment of Section 27.60 outside of a notice-and-comment rulemaking.¹⁰ The Wireless Telecommunication Bureau rejected the first attempt, by upper 700 MHz licensee Access Spectrum, because the methods on which the licensee premised its application did "not provide *full* protection against interference to" an incumbent broadcast station.¹¹ The Bureau recently applied that reasoning to the petition of a lower 700 MHz licensee, Aloha Partners, in rejecting a request to "confirm that 700 MHz licensees may rely upon" an engineering analysis that did not maintain the minimum D/U ratio everywhere within the hypothetical Grade B contour.¹² Although MSTV disagrees with the Bureau's decision to grant *waivers* to Access Spectrum and Aloha, these decisions make clear that, absent a waiver,

⁸ *Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion To Digital Television*, 19 FCC Rcd. 18279, ¶¶ 72-87 (2004) (Second DTV Periodic Review).

⁹ Specifically, two percent of the 109 million people residing in the Grade B contour of channels 54, 55, and 56 and the 126 million people residing in those stations' DTV service contour equals 4.7 million viewers.

¹⁰ MSTV and NAB do not dispute QUALCOMM's assertions concerning the interest that many wireless telephone subscribers may have in its MediaFLO service. However, MSTV and NAB urge QUALCOMM to deploy its service within the established parameters of Section 27.60, which require full protection of the public's television service until the conclusion of the digital transition. MSTV and NAB are willing to work with QUALCOMM to determine the most efficient and effective means of doing so.

¹¹ 19 FCC Rcd. 15545, 15548 (2004) (emphasis added).

¹² Application and Waiver Request of Aloha Partners, "Section 27.60(b) Interference Protection Showing of Aloha Partners", File No. 0001777981 (filed June 18, 2004).

Section 27.60 does not allow 700 MHz licensees to interfere with reception of the public's free, over-the-air television service. The Commission should not indulge QUALCOMM's administratively improper requests, and should instead dismiss its petition or treat it as a Petition for Rulemaking to permit proper notice and comment, and full consideration of the possible impact of QUALCOMM's proposal.

I. QUALCOMM'S REQUESTS WOULD UNLAWFULLY AMEND SECTION 27.60 OUTSIDE A NOTICE-AND-COMMENT RULEMAKING AND WOULD HARM THE PUBLIC'S ACCESS TO FREE, OVER-THE-AIR TELEVISION.

A. The Administrative Procedure Act Would Not Allow Substantive Amendment To Section 27.60 Outside Of A Notice-And-Comment Rulemaking.

It is an axiomatic principle of U.S. administrative law that an agency's codified rules may not be amended outside of a notice-and-comment rulemaking. Yet, as described below, that is exactly what QUALCOMM asks the Commission to do. Thus, the Commission should dismiss QUALCOMM's "Petition for Declaratory Ruling," or treat it as a Petition for Rulemaking. To do otherwise would violate the Administrative Procedure Act (APA). 5 U.S.C. § 553.

There can be no doubt that Section 27.60 is a "legislative rule." A "legislative rule" is a rule adopted by a government agency in accordance with the notice and comment requirements of the APA that has the "force of law" and imposes new duties on the regulated parties.¹³ First, Section 27.60 was adopted under notice-and-comment procedures and was published in the Code of Federal Regulations at 47 C.F.R. § 27.60. Second, as a federal regulation, Section 27.60 has the "force of law" and provides the basis for enforcement actions

¹³ Merriam-Webster's Dictionary of Law 1996. *See also Jerri's Ceramic Arts, Inc. v. Consumer Product Safety Comm'n.*, 874 F.2d 205, 207 (1989); *American Min. Congress v. Mine Safety & Health Admin.*, 995 F.2d 1106 (D.C. Cir. 1993), *citing* 5 U.S.C. § 553(b)(3)(A).

by the FCC to accomplish the stated purpose of the rule to “reduce the potential for interference to public reception of the signals of existing TV and DTV broadcast stations transmitting on TV Channels 51 through 68.”¹⁴ Third, in the Order establishing Section 27.60, the Commission explicitly invoked its general legislative power pursuant to 47 U.S.C. § 303.¹⁵

Because it is a legislative rule, Section 27.60 may only be amended pursuant to a notice-and-comment rulemaking: Section 553(b) of the APA specifically requires notice-and-comment rulemaking to amend an agency’s “legislative rule.” In *Nat’l. Family Planning & Reproductive Health Ass’n. v. Sullivan*, the U.S. Court of Appeals for the D.C. Circuit declared that “an amendment to a legislative rule must itself be legislative.”¹⁶ There, the Dept. of Health and Human Services (HHS) had issued “program guidelines” outside of a notice-and-comment rulemaking concerning Title X of the Public Health Service Act. These “guidelines” provided that “[r]eferrals may be made by Title X programs to full-service health care providers that perform abortions, but not to providers whose principal activity is providing abortion services,” despite the existing codified regulation’s provision that “Title X project may not provide counseling concerning the use of abortion as a method of family planning or provide referral for abortion as a method of family planning.” The Court there held that the “guidelines” were in fact amendments to a legislative rule and *not* mere “interpretive” statements. It reasoned that:

“When an agency promulgates a legislative regulation by notice and comment directly affecting the conduct of both agency personnel and members of the public, whose meaning the agency announces as clear and definitive to the public ... it may not subsequently repudiate that announced meaning and substitute for it a totally different meaning without proceeding through the notice

¹⁴ 47 C.F.R. § 27.60.

¹⁵ 17 FCC Rcd. at 1098.

¹⁶ 979 F.2d 227, 235 (D.C. Cir. 1992).

and comment rulemaking normally required for amendments of a rule. To sanction any other course would render the requirements of § 553 basically superfluous in legislative rulemaking by permitting agencies to alter their requirements for affected public members at will through the ingenious device of ‘reinterpreting’ their own rule.”

QUALCOMM’s Petition would have the Commission commit the same error that the D.C. Circuit struck down in *National Family Planning*. As described in more detail below, QUALCOMM’s Petition asks not for a mere “interpretation” of Section 27.60, but rather new and different rules (*i.e.*, amendments) under that Section. For example, QUALCOMM asks the FCC to replace the interference standard of Section 27.60, which requires 700 MHz entrants to avoid creation of *any* new interference to the public’s television service, with a right to create up to two percent new interference. This amendment would clearly create “new rights” for QUALCOMM and other 700 MHz entrants that they are not accorded under Section 27.60.¹⁷ QUALCOMM also asks that 700 MHz entrants be allowed to make the required interference showings under Section 27.60 using OET-69, an interference standard not provided for in Section 27.60 and designed strictly for measuring broadcast-to-broadcast interference. It also asks that the FCC establish new “streamlined” procedures which would grant a “rebuttable presumption” in favor of 700 MHz applications for operation premised on an OET-69 interference showing. If any of the requests were granted by “declaration,” the Commission would *substantively* amend Section 27.60 outside of a notice-and-comment rulemaking.

The Commission’s four-paragraph outline of QUALCOMM’s Petition in a Public Notice, which was not published in the Federal Register, does not meet the standards of the APA for amendment of a legislative rule. That is, the Public Notice is not a notice of proposed

¹⁷ See, *e.g.*, *Hobbs v. U.S.*, 947 F.2d 941 (1991) (explaining that a legislative rule “creates new law or imposes new rights or duties.”).

rulemaking. Section 553(b) of the APA requires that “[g]eneral notice of proposed rule making shall be published in the Federal Register, unless persons subject thereto are named and either personally served or otherwise have actual notice thereof in accordance with law.” Reflecting this statutory requirement, the Commission’s rules provide for publication of a notice of proposed rulemaking in the Federal Register, unless “all persons subject to the proposed rules are named and have actual notice of the proposal as a matter of law.”¹⁸ The Public Notice, however, does not name the persons or entities, such as UHF broadcasters on channels 54-56, which would be affected by the proposed amendments to Section 27.60. The APA also requires that a notice of proposed rulemaking include “reference to the legal authority under which the rule is proposed.”¹⁹ No such reference appears in the Public Notice concerning QUALCOMM’s request. Accordingly, grant of QUALCOMM’s Petition would unlawfully amend Section 27.60 without proper notice and comment.

B. The Commission Cannot Allow 700 MHz Licensees To Create So-Called “De Minimis” Interference To The Public’s Television Service.

1. Section 27.60 Creates A “No New Interference” Standard.

Section 27.60 prohibits the “finding” requested by QUALCOMM that would allow 700 MHz entrants to create so-called “*de minimis*” interference to up to two percent of viewers within a given station’s service area. In fact, Section 27.60 establishes a standard which prohibits the creation of *any* new interference to viewers of free, over-the-air television. Thus, QUALCOMM’s proposed standard would substantively amend Section 27.60.

¹⁸ 47 C.F.R. § 1.412(a)(3).

¹⁹ 47 U.S.C. § 553(b)(2).

During the digital transition, 700 MHz entrants operate under a strict “no new interference” principle vis-à-vis the public’s television service. When the Commission adopted service rules for the lower 700 MHz band, it made clear Section 27.60’s underlying purpose: “to ensure that new licensees in the Lower 700 MHz Band protect existing analog TV operations and new DTV channel allotments and operations that will occupy the band during the [DTV] transition period.”²⁰ At the same time, the Commission expressly declined a proposal by one commenter to “revise its maps depicting the Grade B contours of Channels 52-59 using the actual field strength criteria based on new field measurements,” finding that “any such ad hoc re-evaluations of broadcast protections could inadvertently lead to loss of service by viewers.”²¹ This history directly contradicts QUALCOMM’s claim that the Commission could issue a “declaration” allowing 700 MHz entrants to cause up to two percent new interference to a given station’s viewing population.

When the Commission has allowed “*de minimis*” interference, it has done so strictly in the context of a notice-and-comment rulemaking. For example, the Commission’s amendment of Section 73.623(c), which instituted the two percent/ten percent standard for DTV source interference, was achieved in a properly-constituted rulemaking proceeding.²² Similarly, when the Commission applied that same *de minimis* interference standard to three-way band clearing agreements in the *upper* 700 MHz service band, it did so only after announcing and

²⁰ 17 FCC Rcd. at 1047.

²¹ *Id.* In light of the Commission’s well-stated intent in promulgating Section 27.60, it erred in *Access Spectrum* in finding that “the underlying purpose of section 27.60 is to permit 700 MHz operations where it is demonstrated that co-channel or adjacent channel interference to TV/DTV stations will be prevented.” 19 FCC Rcd. at 15551. There is no support for such a reading of Section 27.60. MSTV and NAB therefore assert that the waiver request in *Access Spectrum* was improperly granted.

²² *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, 13 FCC Rcd. 7418, 7450 (1998).

describing the proposal in a Notice of Proposed Rulemaking.²³ One cannot properly claim that what QUALCOMM suggests is an “interpretation” of Section 27.60 rules. Thus, there is no basis for simply “declaring” that 700 MHz entrants may cause interference to up to two percent of viewers in a station’s service area.²⁴

2. The Requested Two Percent Interference Allowance Would Cause A Net Loss Of The Public’s Access To Free, Over-The-Air Television Service.

Even if QUALCOMM’s request were procedurally proper, the Commission should not allow QUALCOMM or other 700 MHz entrants the right to create new interference to as much as two percent of the public’s free, over-the-air television service. By reducing access to free, over-the-air television, grant of QUALCOMM’s request would favor users able or willing to pay for content on their mobile phones over those receiving free and local over-the-air television.

Unlike QUALCOMM’s request, the existing *de minimis* standard for DTV source interference is premised on a positive – or at a minimum, neutral – effect on the public’s DTV broadcast television service. As the Commission has explained, “[i]n the full-service [television] context, the benefit offsetting the loss of service to interference was the flexibility to construct DTV stations more quickly in order to start the DTV transition and, in most cases, the ability to provide new DTV service to a substantially larger number of viewers.”²⁵ Thus, the two percent

²³ See 15 FCC Rcd. 20845, 20881 (2000).

²⁴ As described below, in light of the inapplicability of OET-69 for measuring interference from wireless services to the public’s television service, the Commission should also reject QUALCOMM’s request for “a rebuttable presumption in favor of [a 700 MHz entrant’s] OET-69 showing.” QUALCOMM Petition at 23.

²⁵ *Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations*, 19 FCC Rcd. 19331, ¶ 103 (2004).

de minimis standard is a narrowly tailored tool designed to promote the DTV transition. Yet QUALCOMM's approach would sacrifice viewers' access to the free, over-the-air television service in favor of a *subscription* wireless service. In fact, QUALCOMM's service requires users to pay twice: first for the standard commercial mobile radio service (CMRS) service and then an additional fee for access to MediaFLO content.²⁶ The Commission should not – nor can it, as described above – “balanc[e]” the loss of free television services “against the benefits of the introduction of new” subscription wireless services.²⁷

Recognizing the danger of allowing up to two percent of new interference to the public's television service, both the Commission and Congress have refused to extend the DTV two percent interference standard to other areas. In the Auction Reform Act of 2002, Congress expressly forbade the Commission from granting requests by out-of-core analog stations to relocate to the core if such relocation would violate the analog spacing requirements.²⁸ Similarly, in the recent Order establishing rules for digital low power television services, the Commission flatly rejected requests that digital LPTV stations be granted a two percent “*de minimis*” allowance to interfere with full-power stations, finding instead that a 0.5 percent “no interference” standard should apply.²⁹

The Commission has been particularly wary of interference concerns during the recently-initiated DTV channel election process. Even without a new interference right for 700

²⁶ See, e.g., *Channel 55 to Go Live*, Andrew Seybold's Outlook 4 Mobility (2004), available at <http://www.outlook4mobility.com/commentary2004/nov0404.htm> (last visited Feb. 10, 2005) (“If the [QUALCOMM MediaFLO] services are priced attractively, this could be another great source of revenue for wireless network operators.”).

²⁷ QUALCOMM Petition at 19.

²⁸ Auction Reform Act of 2002, Pub. L. 107-195, 116 Stat. 717.

²⁹ 19 FCC Rcd. 19331, at ¶ 101.

MHz entrants, the channel election process is already a challenge for broadcasters and the Commission alike. As the Association of Federal Communications Consulting Engineers (AFCCE) recently explained in requesting additional time for filing first round elections, “[b]ecause a station will remain on the channel selected for the foreseeable future, careful study needs to be exercised in making this selection so that an optimization of the coverage can be done prudently and wisely.”³⁰ The Commission has accordingly established a 0.1 percent standard for protection of a station’s “locked-in” DTV channel during the channel election process.³¹ That is, a station’s channel election may not cause greater than 0.1 percent additional reduction in the service population of another station’s protected DTV channel. QUALCOMM’s requested standard would thus allow 700 MHz entrants to create *twenty times* more interference to television stations than the Commission allows stations to create for each other during the channel election process. Such an interference allowance would disrupt the already-complex channel election process.

C. There Is No Basis For Using OET-69 To Demonstrate “Compliance” With The Television Interference Protection Standards Of Section 27.60.

The Commission designed the process described in Office of Engineering Technology Bulletin No. 69, “Longley-Rice Methodology for Evaluating TV Coverage and Interference” (OET-69) strictly as a measurement of broadcast interference for the purpose of the broadcast DTV transition. Absence of *any* mention of OET-69 in Section 27.60, or in the respective Orders which established Section 27.60 for operation in the lower and upper 700 MHz

³⁰ Letter from Thomas B. Sullivan, President, AFCCE, to Marlene H. Dortch, Secretary, FCC, Jan. 14, 2005, at 2. The Commission extended the filing date for indicating First Round Elections from Jan. 27, 2005 to Feb. 10, 2005 “[i]n view of our interest in a smooth and accurate channel election process.” See Order Granting Further Extension of Time to File First Round DTV Channel Election Forms, *Second Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, MB Docket No. 03-15, DA 05-164, ¶ 3 (rel. Jan. 24, 2005).

³¹ Second DTV Periodic Review at ¶ 46.

bands, attests to OET-69's unsuitability as a measure of interference from wireless services like MediaFLO. QUALCOMM's request that the Commission allow it and other 700 MHz licensees to use OET-69 to demonstrate "compliance" with Section 27.60 would both violate the Commission's rules and fail to adequately measure interference from the 700 MHz entrants to the public's television service.

QUALCOMM's Petition threatens even further harm by asking that interference be measured from a transmitter *within* the affected station's Grade B contour. Even in OET-69's appropriate context (*i.e.*, as a measure of broadcast-to-broadcast interference), it has no applicability for transmissions within the Grade B contour.

1. Section 27.60 Does Not Allow For Use Of OET-69 In Measuring Interference To The Public's Television Service.

The Commission should reject QUALCOMM's request for a "declaration" that 700 MHz entrants may use OET-69 to demonstrate "compliance" with the D/U requirements of Section 27.60. Section 27.60 does not allow such use of OET-69, which is solely a tool for measuring digital television source interference. If the Commission were to grant QUALCOMM's request to so use OET-69, it would amend Section 27.60 without proper notice and comment.

When the Commission has provided for use of OET-69 in making an interference calculation, it expressly states so in its rules.³² For example, the Commission's Part 74 rules expressly allow an applicant for a low power TV, TV translator, or TV booster to "make full use of terrain shielding and Longley-Rice terrain dependent propagation methods to demonstrate that the proposed facility would not be likely to cause interference to digital low power TV or TV

³² See, e.g., 47 C.F.R. §§ 73.613, 73.622, 73.623, 73.683, 74.703, 74.705, 74.707, and 74.710.

translator stations.”³³ Yet throughout the lower and upper 700 MHz Orders which established Section 27.60 rule, there is not a single mention of OET-69. Had the Commission intended to allow 700 MHz entrants to use OET-69 in demonstrating compliance with Section 27.60, it would have codified the standard in its rules.

Furthermore, QUALCOMM employs a tortured reading of Section 27.60 to incorrectly claim that the rules allow 700 MHz entrants to operate *within* an adjacent station’s licensed service area. The rules in fact subject 700 MHz entrants to strict D/U limits at the boundary of a station’s service contour (regardless of whether the location of the contour’s border is measured using a station’s hypothetical or actual parameters). Pursuant to Section 27.60(a), the Commission requires adjacent channel 700 MHz entrants to meet a minimum D/U ratio of “0 dB at the hypothetical Grade B Contour ... of the TV station or -23 dB at the equivalent Grade B Contour ... of the DTV station.” Section 27.60(b), entitled “TV stations and calculation of contours,”³⁴ then provides methods for measuring a television station’s service area and the distance from the outer edge of that service area at which a Part 27 entrant may operate. Under the third method, specified at 27.60(b)(1)(iii), an entrant may evaluate separations based on the station’s “actual” rather than “hypothetical” parameters; yet whether actual or hypothetical, the entrant may not operate *within* those parameters.

There is no precedent for QUALCOMM’s reading of Section 27.60(b)(1)(iii). The Part 90 rules from which Section 27.60 is expressly derived do not allow public safety

³³ 47 C.F.R. § 74.710.

³⁴ 47 C.F.R. § 27.60(b).

systems in the upper 700 MHz band to operate within a television station's Grade B contour.³⁵ Moreover, the Wireless Telecommunications Bureau recently rejected an argument, similar to QUALCOMM's, by Access Spectrum. In that case, the licensee acknowledged that its proposed facility was "within the hypothetical Grade B contour of Television Broadcast station KZJL and it does not meet the applicable separation criteria," but submitted an engineering study allegedly in accordance with § 27.60(b)(1)(iii) and "[b]ased on the actual operating parameters of the land mobile facility and the affected broadcast facility."³⁶ The Bureau disagreed, finding that Access Spectrum's operation could not proceed absent a waiver "because Access Spectrum, which proposes to locate its transmitter inside the hypothetical Grade B contour of KZJL, does not comply with the interference protection specified in section 27.60(a)."³⁷ The Commission should similarly reject QUALCOMM's request to operate within any adjacent station's licensed contour.

2. OET-69 Would Fail To Adequately Measure Interference From Wireless Services.

It is not mere oversight that the Commission did not provide for use of OET-69 in measuring interference from wireless entrants to broadcast television services. Rather, OET-69 would fail to adequately measure potential interference from proposed 700 MHz operations. Just as temperature cannot be measured with a barometer, interference from new wireless entrants to broadcast television services cannot be measured with OET-69.

³⁵ *Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010*, 14 FCC Rcd. 152, 188 (1998) (deciding the "geographic separation needed between public safety base stations and the Grade B service contours of co-channel and adjacent channel TV stations.").

³⁶ Application and Waiver Request of Access Spectrum, "Waiver - Expedited Action Requested," File No. 0001669196, 6 (filed March 24, 2004).

³⁷ 19 FCC Rcd. at 15548.

As explained in the attached engineering analysis prepared by Cohen, Dippell and Everist, P.C., the assumptions inherent in OET-69 render it inapplicable for measuring interference from a non-DTV service such as that marketed by QUALCOMM.³⁸ For example, OET-69 does not consider aggregate interference from multiple stations. Yet QUALCOMM and other 700 MHz licensees will likely deploy *multiple* transmitters within a single market.³⁹ Multiple undesired signals from QUALCOMM's transmitters would significantly degrade the public's reception of its free, over-the-air television service.⁴⁰ QUALCOMM overlooks the multiple-transmitter problem by incorrectly claiming that these undesired signals would "cancel in some cases."⁴¹ Furthermore, OET-69 assumes vertical elevation patterns that likely will differ from the vertical pattern(s) of the antennas QUALCOMM would employ; as a result, OET-69 would significantly underestimate interference levels to the public's television service from QUALCOMM's service.

Even as a tool for measuring interference among television stations, OET-69 has recognized flaws. As one of QUALCOMM's consulting engineers, William Meintel, has written, OET-69 uses a theoretical propagation model based on field test data, which does not

³⁸ See Cohen, Dippell and Everist, P.C., Engineering Statement Prepared on Behalf of MSTV for Joint Comments and Informal Objection to the Petition for Declaratory Ruling by QUALCOMM Incorporated re: Use of OET Bulletin 69 Methodology Under Section 27.60 of the FCC Rules, March 2005, *supra*, Attachment ("CD&E Engineering Statement").

³⁹ See Caroline Gabriel (of Wireless Week UK), *Qualcomm's Bold Move*, Nov. 9, 2004, available at <http://p2pnet.net/story/2943> (last visited Feb. 10, 2005) (citing statements of Dr. Paul Jacobs, President, Wireless and Internet Group, QUALCOMM, that MediaFLO will use as many as three towers to cover a single city).

⁴⁰ As the attached engineering analysis explains, "OET -69 does not account for the cumulative adverse effect of multiple undesired signals, either on the same frequency or within the relatively broad frequency range of a receiver's front end." CD&E Engineering Statement at 7.

⁴¹ *Id.* at 6-7.

translate well to dense urban areas.⁴² Also, OET-69 ignores predicted service outside a station's service contour. In other words, QUALCOMM and other 700 MHz entrants would have free reign in interfering with viewers outside the contour, thus harming rural viewers who often reside in such areas. Contrary to QUALCOMM's assertion, OET-69 is not an "accurate, real-life protector against interference."⁴³

QUALCOMM's proposed use of OET-69 would have particularly disastrous results because it would allow a 700 MHz entrant to operate within an adjacent television station's service area.⁴⁴ Section 27.60 sets an adjacent channel D/U limit of 0 dB *at the broadcast station's protected contour*, not within the contour. As explained in the attached engineering analysis, the D/U ratios of OET-69 "OET-69 intentionally selected parameters (D/U ratios) that are only applicable to computing interference at the outer edge of the TV station's service area, where weak signal conditions generally exist. It does not include D/U ratios to predict interference that may affect a TV station's core service area where strong signal conditions predominate."⁴⁵ Yet QUALCOMM proposes to operate inside the service contour but at D/U levels no stricter than those which Section 27.60 applies at the contour. Such operation would unquestionably generate harmful interference to the public's television service.

⁴² See Doug Lung, *RF@NAB: DTV Reception and Interference*, TV Technology.com, July 7, 2004, available at http://www.tvtechnology.com/features/On-RF/f_rf_technology-07.07.04.shtml (last visited Feb. 10, 2005) (describing a presentation by William Meintel which detailed problems with the initial planning factors of OET-69).

⁴³ QUALCOMM Petition at 10.

⁴⁴ QUALCOMM's spectrum is at existing television channel 55. It seeks amendment to the television interference protection standards that would allow it to operate within the licensed service contours of adjacent channels 54 and 56.

⁴⁵ CD&E Engineering Statement at 4.

D. Section 27.60 Does Not Allow The Requested “Streamlined” Procedures, Which Would Be Particularly Harmful If They Were To Incorporate The OET-69 Analysis Requested By QUALCOMM.

QUALCOMM’s request for new, streamlined procedures would similarly fall outside the scope of a Petition for Declaratory Ruling. Specifically, QUALCOMM asks that the Commission “declare” that “[w]hen QUALCOMM submits a showing that it will comply with OET-69 in a particular market, the burden should then shift to any objector to show that in fact QUALCOMM will not comply.”⁴⁶ Because they would amount to an amendment of Section 27.60, the Commission cannot establish these procedures by declaration. Also, the requested procedures would be particularly inappropriate because they would promote flawed interference showings premised on OET-69.

Section 27.60 put the burden on 700 MHz entrants to demonstrate compliance with the television interference protection standards. Indeed, in the *Lower 700 MHz Service Rules* proceeding, the Commission expressly sought comment on “whether licensees should be subject to streamlined operating rules contained in Part 27 and/or operating rules contained in other parts of its rules.”⁴⁷ It declined, however, to adopt such procedures.⁴⁸ No party petitioned the Commission for reconsideration of that decision. If QUALCOMM wishes to see such procedures adopted now, it must petition the Commission for a further rulemaking.

As noted above, the use of OET-69 itself as a means for demonstrating “compliance” with Section 27.60 would fail to measure the impact of entrants’ proposed services on the public’s television service. These already grave miscalculations would worsen if the

⁴⁶ QUALCOMM Petition at 22. It also asks for a “shortened public notice period.” *Id.*

⁴⁷ 17 FCC Rcd. at 1081.

⁴⁸ *Id.*

Commission were to adopt streamlined procedures favoring applications premised on OET-69. For example, QUALCOMM would require that objecting parties – who would presumably be motivated by concerns of harmful interference to the public’s television service – bear the burden of refuting the flawed OET-69 analysis. QUALCOMM’s contention that these streamlined procedures would “increase the value” of its spectrum holdings overlooks the value of free, over-the-air television to the American public.⁴⁹

II. THE COMMISSION SHOULD NOT UNDERESTIMATE THE PUBLIC INTEREST HARMS OF A NET LOSS IN THE PUBLIC’S ACCESS TO FREE, OVER-THE-AIR TELEVISION.

The Commission should not underestimate the public interest harms of a net loss to the public’s over-the-air television service. Over-the-air television viewing is pervasive and remains extremely important to the American consumer. Accordingly, QUALCOMM’s efforts to substitute free over-the-air television with subscription-based wireless services should be rejected.

Approximately 21 million households⁵⁰ with an aggregate 45 million sets rely *solely* on free, over-the-air television.⁵¹ Those viewers rely on over-the-air television for local news, sports, weather, and entertainment. In times of emergency, their lives may be saved when local television stations disseminate critical information from government officials to members of a community. For example, as the *Orlando Sentinel* reported after last year’s Hurricane

⁴⁹ QUALCOMM Petition at 25.

⁵⁰ *Estimated Cost of Supporting Set-Top Boxes to Help Advance the DTV Transition: Testimony Before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, U.S. House of Representatives*, Statement of Mark L. Goldstein, Director, Physical Infrastructure Issues, GAO, 7-8 (Feb. 17, 2005) (GAO Study). *See also* Comments of NAB and MSTV, MB Docket No. 04-210, *passim*, Attachment A (NAB/MSTV OTA Comments).

⁵¹ NAB/MSTV OTA Comments at 2.

Charley, local broadcasters in Florida predicted and informed viewers that the hurricane would hit areas far south of the trajectory previously announced by the National Hurricane Center.⁵²

When access to a free, over-the-air signal is curtailed in favor of a pay service, some viewers experience that loss greater than others. For example, in some markets the number of homes not connected to cable or satellite services may reach as high as 40 percent. Variations may also occur along cultural lines. Univision has reported that nationwide, 33 percent of Hispanic households receive their programming solely over the air.⁵³ Over-the-air viewers should not be deprived access to these critical local services merely because they do not, or cannot, subscribe to a pay television service.

Moreover, cable and satellite subscribers are also affected by loss of free, over-the-air television service. As the General Accounting Office (GAO) has reported, over ten million households that subscribe to cable have *at least* one television set that is not connected to cable.⁵⁴ Added to the sets in homes solely relying on over-the-air service, there are an estimated 73 million television sets not connected to a pay television service in the U.S.⁵⁵ Also, in many communities, the over-the-air signal is the *only* means of receiving a broadcast station's HDTV programming.⁵⁶ QUALCOMM ignores this reality when it claims that cable and DBS

⁵² Orlando Sentinel, Aug. 15, 2004, at A26. *See also* Reply Comments of MSTV/NAB, MB Docket No. 04-210, at 11-14.

⁵³ Comments of Univision Communications, Inc., in MB docket No. 04-210 at 8, August 11, 2004.

⁵⁴ GAO Study at 8.

⁵⁵ NAB/MSTV OTA Comments at 5.

⁵⁶ *See, e.g., Three Ways to Get HDTV Programming*, CNET.com, available at http://www.cnet.com/4520-7874_1-5108854-3.html (last visited Feb. 10, 2005) (“While a good number of cable networks are broadcasting in HDTV, they've been slow in rolling out the service to their customers, and there's no sign of that changing soon.”).

subscribers “would not be affected at all by any interference” from MediaFLO and other 700 MHz entrants.

III. QUALCOMM AND OTHER LOWER 700 MHZ LICENSEES WOULD RECEIVE AN INAPPROPRIATE WINDFALL IF THE COMMISSION WERE TO WEAKEN THE TELEVISION INTERFERENCE PROTECTION STANDARDS OF SECTION 27.60.

Licensees like QUALCOMM which bid in the 2002 and 2003 auctions of lower 700 MHz spectrum had an abundance of notice that any spectrum obtained would be accompanied by the requirement to protect the public’s television service from interference during the digital transition. As the Commission announced in the *Lower 700 MHz Service Rules* to QUALCOMM and other potential bidders, “existing broadcast operations ... will likely remain in operation until the end of the transition to DTV, *which may extend beyond the 2006 target date.*”⁵⁷ Shortly after the Commission promulgated those rules, Congress passed the Auction Reform Act of 2002, which delayed auction of most of the 700 MHz spectrum based on the finding that the pending digital transition “creates a tremendous amount of uncertainty concerning when the spectrum will be available and reduces the value placed on the spectrum by potential bidders.”⁵⁸ As Congress concluded, “[t]he encumbrance of the 700 megahertz band reduces ... the amount of money that the auction would be likely to produce.”⁵⁹ The House Report to that Act further reported the concerns of some members of Congress that “many communities will not achieve 85 percent penetration of digital television by the end of 2006 at the current pace.”⁶⁰ The prices paid for this spectrum reflected these encumbrances.

⁵⁷ 17 FCC Rcd. at 1028 (emphasis added).

⁵⁸ Pub. L. 107-195, 116 Stat. 716 (2002).

⁵⁹ *Id.*

⁶⁰ H.R. Rep. 107-443, 3 (2002).

If QUALCOMM is allowed to operate as though the transition were already complete, it would unjustly obtain a windfall. The Commission should instead hold QUALCOMM to what it received in 2003: the right to operate on 700 MHz spectrum only to the extent that such operation does not harm the public's access to out-of-core television services during the transition. Accordingly, there is no merit to QUALCOMM's argument that Section 27.60, as written, "reduce the value of spectrum" it obtained at auction.⁶¹

IV. WEAKENING OF THE TELEVISION INTERFERENCE PROTECTION STANDARDS WOULD FRUSTRATE CONGRESSIONAL EXPECTATIONS.

Because they would result in substantially increased interference to the public's television service, the requested amendments to Section 27.60 would run afoul of Congressional intent concerning the digital transition, as expressed in the Communications Act at Sections 309(j)(14) and 337(e). As the Commission has recognized, "[i]ncumbent conventional television broadcasters are permitted by statute to continue operations" in the 700 MHz bands "until their markets are converted to digital television."⁶² Implicit in these statements is a requirement that the Commission protect out-of-core broadcasters and their viewers from interference from new services. Indeed, the Auction Reform Act of 2002 delayed the auction of most lower 700 MHz spectrum in recognition that, due to the ongoing digital transition, the spectrum would be "unavailable" to 700 MHz entrants for some time.⁶³ In accordance with Congressional intent, the Commission has "anticipated that the [lower 700 MHz band] will remain principally a

⁶¹ QUALCOMM Petition at 15.

⁶² 17 FCC Rcd. 476, 479 (2000).

⁶³ Pub. L. 107-197, 116 Stat. 716.

television band until the end of the digital transition.”⁶⁴ To allow new interference to the public’s television service would effectively “reclaim” this out-of-core spectrum ahead of the end of the digital transition, in violation of the Commission’s stated understanding of the Communications Act.

By interfering with the public’s television service – including DTV reception – interference from 700 MHz entrants operating under relaxed standards would also frustrate Congressional expectations that the Commission foster a successful conclusion to the digital transition. DTV is an all-or-nothing technology; loss of service means not just a poor picture, but no picture at all.⁶⁵ If consumers are subjected to harmful interference from 700 MHz entrants, they will see a frozen picture or blank screen. Such disruption could easily derail the digital transition, which is currently at a critical juncture in its development. Indeed, as recently as December 2004, Congress has explored ways to complete the transition.⁶⁶

⁶⁴ 17 FCC Rcd. at 1028. *See also* 18 FCC Rcd. 1279, 1294 (2003) (discussing Congress’s requirement that the Commission establish rules to “protect analog and digital television service” in the 700 MHz bands from potentially interfering uses by new licensed wireless operators in that band).

⁶⁵ *See* Joint Comments of MSTV and NAB, ET Docket No. 02-380 (filed Jan. 27, 2003).

⁶⁶ *See e.g.*, S. 2845 § 7501, 108th Cong. (2004) (enacted). Congress is currently preparing to hold hearings on the conclusion of the digital transition.

CONCLUSION

QUALCOMM's Petition for Declaratory Ruling seeks to improperly amend the television interference protection standards of Section 27.60 outside of a notice-and-comment rulemaking. In addition to this procedural deficiency, QUALCOMM's Petition would unjustly enrich QUALCOMM and other 700 MHz licensees at the expense of the public's free, over-the-air television service and Congressional expectations. Accordingly, the Commission should dismiss QUALCOMM's Petition, or, in the alternative, treat it as a Petition for Rulemaking.

Respectfully submitted,

NATIONAL ASSOCIATION
OF BROADCASTERS



Marsha J. MacBride
Executive, Executive Vice President,
Legal and Regulatory Affairs
Valerie Schulte,
Deputy General Counsel
Kelly Williams
Sr. Director of Engineering and
Technology Policy
NATIONAL ASSOCIATION
OF BROADCASTERS
1771 N Street NW
Washington, D.C. 20036
(202) 429-5456 (tel.)
(202) 429-4199 (fax)

ASSOCIATION FOR MAXIMUM
SERVICE TELEVISION, INC.



David L. Donovan
President
Victor Tawil
Senior Vice President
ASSOCIATION FOR MAXIMUM
SERVICE TELEVISION, INC.
P.O. Box 9897
4100 Wisconsin Avenue, NW
Washington, D.C. 20016
202-966-1956 (tel.)
202-966-9617 (fax)

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